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ABSTRACT

According to the major attributional hypotheses, egotism and expectancy confirmation, people tend to make internal attributions when successful and external attributions when they fail. In order to investigate the effect of manipulation on egotistical and expectancy confirmation attributions, 190 female undergraduates participated in two series of card sorting tasks. Outcomes, bases of expectancies, and levels of expectations were manipulated for some participants (N=80). Subjects sorted two series of 30 cards, containing a number which varied in length from one to three digits. After each 5 minute card sort task, subjects rated on a 7-point scale, the extent to which ability and task difficulty were seen as the causes of the outcomes. An analysis of the results partially supported the egotism hypothesis in that attributions were determined by task outcomes rather than expectancy confirmation. However, subjects attributed success to both internal (ability and effort) and external (task difficulty) factors. The manipulation had some effects on external but not on internal attribution. Future research should rule out sex, nature of the task, and subjects' locus of control as influencing variables. (Tables of specific factor analysis are appended.) (BL)

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EFFECTS OF MANIPULATION OF OUTCOME AND EXPECTANCY ON ATTRIBUTIONS

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ABSTRACT

The present study contrasted the egotism and expectancy confirmation by investigating the effects of manipulation versus non-manipulation on egotistical and expectancy confirmation attributions. Two groups of female college students, manipulated (N=80) and non-manipulated (N=110), and two series of card-sorting tasks were used. Outcomes, bases of expectancies, and levels of expectancies were manipulated in the manipulated group only. The egotism hypothesis argues that success will be attributed internally and failure will be attributed externally, while the expectancy confirmation hypothesis argues that confirmed expectancies will be attributed internally and disconfirmed expectancies will be attributed externally. The motivational basis of egotism hypothesis predicts that manipulation of the variables will have no effects on attributions while the non-motivational, informational basis of expectancy confirmation hypothesis predicts that manipulation of the variables will have some effects on attribution. Analysis of variance and Tukey (HSD) tests were used to analyze the data. The results partially supported the egotism hypothesis, but failed to support the expectancy confirmation hypothesis. Subjects were found to attribute success to both internal and external factors. With regard to the effects of manipulation on attribution, it was found that manipulation has some effects on external but not on internal attribution. Possible explanations such as the sex of the subjects, the nature of the task, the lack of information relative to the subjects' locus of control, and the need for an experimental design which would be more suitable for directly studying the effects of manipulation were discussed.

There are two major attributional hypotheses. One is the egotism hypothesis (Snyder, Stephen, & Rosenfield, 1976) and the other is the expectancy confirmation hypothesis (Miller & Ross, 1975). The egotism hypothesis suggests that people make internal attributions when they succeed and external attributions when they fail. On the other hand, the expectancy confirmation hypothesis suggests that people make internal attributions when their expectancy of success is confirmed and external attributions when their expectancy of success is disconfirmed. The purpose of the present study was to contrast these two opposing hypotheses.

Method

Subjects

The subjects were 190 female volunteer undergraduates at Virginia State University. As a result of the study, there were 80 subjects in the manipulated group and 110 subjects in the non-manipulated group (see Figure 1).

Materials

Card sorting task. There were two series of cards and each series consisted of 30 cards. On each card there was a number and these numbers varied from from one to three digits. One series was easier than the other. The easier series consisted of fewer three digit numbers and the numbers could be divided evenly by 2, 3, or 7. The other series consisted of more three digit numbers and the numbers could be divided evenly by 4, 6, or 9.

Procedure

Subjects were run individually by the male experimenter. A series of 30 cards was presented to both the manipulated and non-manipulated groups. The subjects were allowed 5 minutes to sort the cards. The outcomes were manipulated in the manipulated group such that half of the group experienced "success" while the other half experienced "failure". The "success" group received the difficult series while the "failure" group received the easy one. For the non-manipulated subjects, the outcomes were contingent upon their performance.

Prior to administering the second sorting task, the experimenter manipulated the basis of expectancy (ability or task difficult) and the level of expectancy (high or low) for the manipulated group. Half of the manipulated "success" group was told that they had the ability for this task and they would succeed on the second task also. The other half was told that they succeeded because the task was easy and they would succeed on the second task because it was much easier. Similarly, half of the manipulated "failure" group was told that they lacked the required ability and they would fail on the second task. The other half was told that they failed because the task was difficult and they would fail on the second task because it was more difficult.

On the other hand, the basis of expectancy and level of expectancy were not manipulated in the non-manipulated group. Subjects in this group were asked to rate the extent to which ability and task difficulty were seen as the causes of the outcomes for the first sorting task on a 7-point scale. Ability was assigned as the subjects' basis of expectancy if they attributed their success or failure to ability more than to task difficulty. Similarly, task difficulty was assigned as the subject's

basis of expectancy if they attributed their outcome to task difficulty more than to ability. Subjects who succeed on the first task were assumed to have a high expectancy for success on the second task, while those who failed on the first task were assumed to have a low expectancy for success on the second task. Thus four subgroups were formed in manipulated and non-manipulated groups.

The second sorting task was then given to all subjects. The outcomes of the task were manipulated in the manipulated group such that success was given to half of the four subgroups and failure was given to the remaining half. For the non-manipulated group, the outcomes were contingent upon thier performance. Therefore, there were altogether 16 subgroups, eight in the manipulated group and eight in the non-manipulated group (see Figure 1).

Upon completion of the second sorting task, subjects were asked to rate the extent to each of the four factors (ability, effort, luck, & task difficulty) was seen as the cause of the outcomes on a 7-point scale.

Results

Based on the egotism hypothesis, one would predict that success would be attributed more to ability and effort (internal factors), and failure would be attributed more to luck and task difficulty (external factors). On the other hand, the expectancy confirmation hypothesis would predict that confirmed expectancies would be attributed to ability and effort, while disconfirmed expectancies would be attributed more to luck and task difficulty.

A 2(group) X 8(condition) analysis of variance and Tukey (HSD) tests

were used to analyze the data. Results revealed no main effects of manipulation on attributions. However, there was a significant main effect of condition on ability attribution, $F(7, 174)=13.09$, $p<.001$. A Tukey test, as shown in Table 1, demonstrated that ability attribution was emphasized more after success than after failure.

A significant main effect of condition on effort attribution was found, $F(7, 174)=5.22$, $p<.001$. A Tukey test suggested that subjects who experienced success rated effort as a significantly more important causal factor than those who experienced failure (see Table 2).

The results revealed no significant main effect of condition on luck attribution. However, there was a significant main effect of condition on task difficulty attribution, $F(7, 174)=7.75$, $p<.001$. In contrast to what was expected, a Tukey test demonstrated that subjects who experienced success rated task difficulty as a significantly more important causal factor than those who experienced failure (see Table 3).

The relative degree to which internal or external factors were emphasized was also determined by adding the scores of ability and effort as internal attribution, and the sum of the scores of luck and task difficulty as external attribution. The results indicated a significant main effect of condition on internal attribution, $F(7, 174)=14.27$, $p<.001$. A Tukey test, as shown in Table 4, suggested that subjects attributed more to internal factors following success than following failure. A significant main effect of condition was also found on external attribution, $F(7, 174)=3.63$, $p<.001$. In contrast to what was expected, a Tukey test, as shown in Table 5, appeared to suggest that subjects attributed more to external factors following success than following failure.

Discussion

The results provided partial support for the egotism hypothesis rather than the expectancy confirmation hypothesis. The attributions were determined by the outcomes of the task rather than by the expectancy confirmation. The attributions to ability and effort clearly demonstrated that subjects emphasized internal factors in explaining the causes of success. The attribution to luck supported neither the egotism nor the expectancy confirmation hypothesis. It is possible that since the experimental task in the present study was mathematical in nature, luck was less likely to be used to explain success or failure. In contrast to what the egotism hypothesis predicted, it was found that subjects emphasized task difficulty as a more important factor for success than for failure.

In sum, subjects were found to make both internal and external attributions when they succeeded more often than they did when they failed. The most reasonable explanation is, as Miller and Ross (1975) suggested, that subjects are more likely to perceive a causal relationship between their behavior and the outcome when they succeed than when they fail. However, further research has to confirm this explanation.

On ther other hand, no significant effect of manipulation on attributions was found. However, this result appears to lend further support for the egotism hypothesis. Since the egotism hypothesis suggests that people make attributions according to the outcomes they receive, the expectancy for success and the basis of expectancy should have no effects on attributions. The result that there was no effect of such manipulation appears to suggest that the attributions subjects made were based upon the outcomes regardless of their actual performance, their level of expectancy, and basis of expectancy.

References

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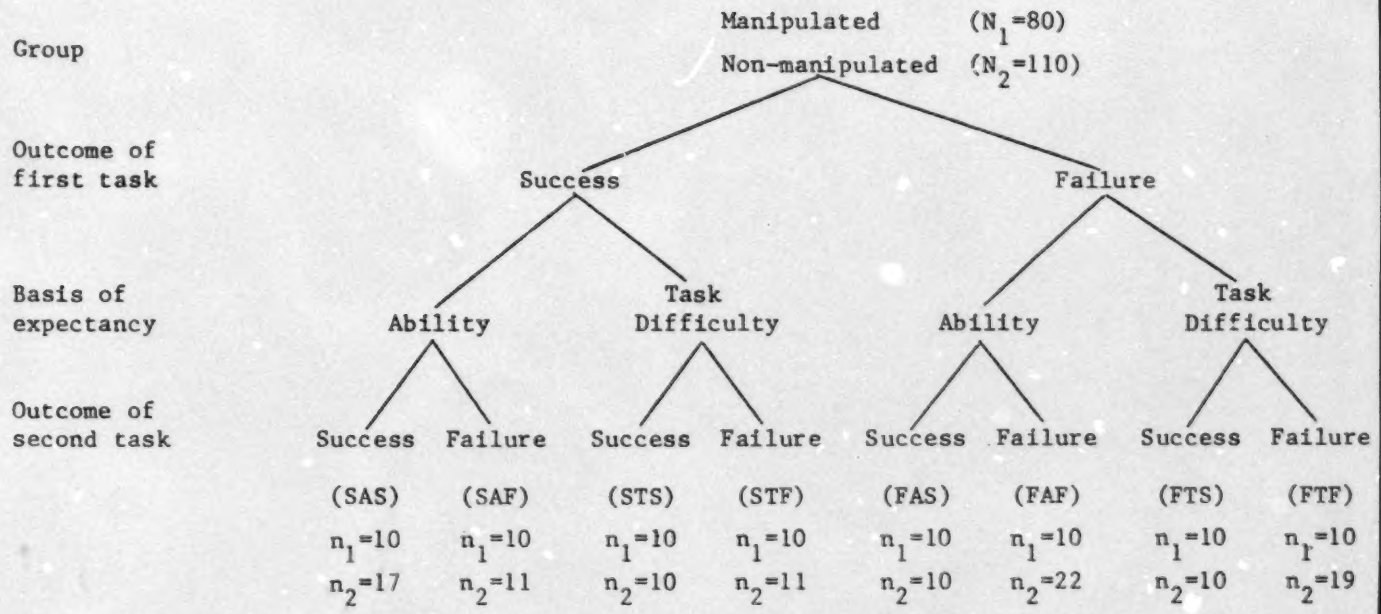

Figure 1. Experimental Design

Table 1

Tukey (HSD) Analysis of Significant Differences

of Conditions on Ability Attribution

CONDITION		STF	FTF	SAF	FAF	FAS	FTS	STS	SAS
	Mean	2.9	3.0	3.3	3.7	4.9	5.3	5.5	5.8
STF	2.9	-	.1	.4	.8	2.0*	2.4*	2.6*	2.9*
FTF	3.0		-	.3	.7	1.9*	2.3*	2.5*	2.8*
SAF	3.3			-	.4	1.6*	2.0*	2.2*	2.5*
FAF	3.7				-	1.2*	1.6*	1.8*	2.1*
FAS	4.9					-	.4	.6	.9
FTS	5.3						-	.2	.5
STS	5.5							-	.3
SAS	5.8								-

S = Success

F = Failure

A = Ability

T = Task difficulty

Maximum score = 7

*$p < .05$

Table 2

Tukey (HSD) Analysis of Significant Differences

of Conditions on Effort Attribution

CONDITION		STF	SAF	FTF	FAF	STS	FAS	FTS	SAS
	Mean	3.5	3.5	4.1	4.6	4.7	4.9	5.6	5.6
STF	3.5	-	-	.6	1.1	1.2	1.4	2.1*	2.1*
SAF	3.5		-	.6	1.1	1.2	1.4	2.1*	2.1*
FTF	4.1			-	.5	.6	.8	1.5*	1.5*
FAF	4.6				-	.1	.3	1.0	1.0
STS	4.7					-	.2	.9	.9
FAS	4.9						-	.7	.7
FTS	5.6							-	-
SAS	5.6								-

S = Success

F = Failure

A = Ability

T = Task difficulty

Maximum score = 7

*$p < .05$

Table 3

Tukey (HSD) Analysis of Significant Differences of

Conditions on Task Difficulty Attribution

CONDITION		STF	FAF	FTF	SAF	FTS	SAS	FAS	STS
	Mean	2.0	2.6	3.0	3.2	4.0	4.1	4.4	5.3
STF	2.0	-	.6	1.0	1.2	2.0	2.1*	2.4*	3.3*
FAF	2.6		-	.4	.6	1.4	1.5	1.8*	2.7*
FTF	3.0			-	.2	1.0	1.1	1.4	2.3*
SAF	3.2				-	.8	.9	1.2	2.1*
FTS	4.0					-	.1	.4	1.3
SAS	4.1						-	.3	1.2
FAS	4.4							-	.9
STS	5.3								-

S = Success

F = Failure

A = Ability

T = Task difficulty

Maximum score = 7

*$p < .05$

Table 4

Tukey (HSD) Analysis of Significant Differences

of Conditions of Internal Attribution

CONDITION		STF	SAF	FTF	FAF	FAS	STS	FTS	SAS
	Mean	6.1	6.8	7.1	8.3	10.0	10.2	10.9	11.4
STF	6.1	-	.7	1.0	2.2	3.9*	4.1*	4.8*	5.3*
SAF	6.8		-	.3	1.5	3.2*	3.4*	4.1*	4.6*
FTF	7.1			-	1.2	2.9*	3.1*	3.8*	4.3*
FAF	8.3				-	1.7	1.9	2.6*	3.1*
FAS	10.0					-	.2	.9	1.4
STS	10.2						-	.7	1.2
FTS	10.9							-	.5
SAS	11.4								-

S = Success

F = Failure

A = Ability

T = Task difficulty

Maximum score = 14

*$p < .05$

Table 5

Tukey (HSD) Analysis of Significant Differences

of Conditions on External Attribution

CONDITION		STF	FAF	SAF	FTF	FTS	FAS	SAS	STS
	Mean	4.4	5.4	5.9	6.3	6.5	7.1	7.3	7.9
STF	4.4	-	1.0	1.5	1.9	2.1	2.7*	2.9*	3.5*
FAF	5.4		-	.5	.9	1.1	1.7	1.9	2.5*
SAF	5.9			-	.4	.6	1.2	1.4	2.0
FTF	6.3				-	.2	.8	1.0	1.6
FTS	6.5					-	.6	.8	1.4
FAS	7.1						-	.2	.8
SAS	7.3							-	.6
STS	7.9								-

S = Success

F = Failure

A = Ability

T = Task difficulty

Maximum score = 14

*$p < .05$